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IN THE CLAIMS

1. (Original) A snooper for efficiently processing at least one Internet Protocol (IP) packet incoming to a mobile station, comprising:

a receiver for receiving the at least one packet;

a storage, communicatively associated with said receiver, for storing at least one list, wherein the at least one list includes at least one Van Jacobson (VJ) connection identification of at least one of an active originator and an active destination for ones of the at least one packet; and

a comparator for delineating a received connection identification of one of the VJ compressed ones of the at least one packet received at said receiver against the at least one list.

2. (Original) The snooper of claim 1, wherein said comparator forwards only those of the at least one packet having a received connection identification delineated to one of the at least one connection identifications on the at least one list to an uncompressor local to the received connection identification.

3. (Original) The snooper of claim 2, wherein the uncompressor is at the mobile station.

4. (Original) The snooper of claim 3, wherein the list includes the connection identifications of the active destinations at the mobile station.

5. (Original) The snooper of claim 3, wherein said comparator delineates by comparing a received connection identification of one of the VJ compressed

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ones of the at least one packet received at said receiver against the at least one list.

6. (Original) The snooper of claim 5, wherein said comparator forwards only those of the at least one packet having a received connection identification that matches one of the at least one connection identifications on the at least one list.

7. (Original) The snooper of claim 6, wherein the at least one list includes at least one connection identification of at least one active destination for ones of the at least one packet.

8. (Original) The snooper of claim 5, wherein said comparator forwards only those of the at least one packet having a received connection identification that does not match one of the at least one connection identifications on the at least one list.

9. (Original) The snooper of claim 8, wherein the at least one list includes at least one connection identification of at least one active originator for ones of the at least one packet.

10. (Original) The snooper of claim 2, wherein the uncompressor is at a terminal equipment tethered to the mobile station.

11. (Original) The snooper of claim 10, wherein the list includes the connection identifications of the active destinations at the terminal equipment.

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12.   (Original)   The snooper of claim 11, wherein said comparator forwards only those of the at least one packet having a received connection identification that matches one of the at least one connection identifications on the at least one list.

13.   (Original)   The snooper of claim 12, wherein the at least one list includes at least one connection identification of at least one active destination for ones of the at least one packet.

14.   (Original)   The snooper of claim 12, wherein the at least one list includes at least one connection identification of at least one active originator for ones of the at least one packet.

15.   (Original)   A filter for efficiently processing at least one packet incoming to a mobile station, comprising:

a receiver for receiving IP ones and VJ uncompressed ones of the at least one packet;

a delineator for delineating the IP ones from the VJ uncompressed ones of the packets, wherein said delineator seeks a connection identification in a one of the VJ uncompressed packets upon delineation of the one of the VJ uncompressed packets as destined for the mobile station, and wherein said delineator forwards the connection identification to a connection identification list for subsequently assessing a destination of at least one VJ compressed packet associated with the one of the VJ uncompressed packets.

16.   (Original)   The filter of claim 15, wherein, upon delineation by said delineator of an IP packet, said delineator seeks a received connection identification in a subsequent one of the VJ uncompressed packets upon

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delineation of one of the IP packets if the one of the IP packets is delineated as destined for the mobile station.

17. (Original) The filter of claim 15, further comprising a tether to at least one terminal equipment communicatively associated with said delineator.

18. (Original) The filter of claim 17, wherein ones of the VJ uncompressed packets not delineated as destined for the mobile station are destined for the terminal equipment.

19. (Original) The filter of claim 18, wherein ones of the IP packets are delineated, and wherein ones of the IP packets not delineated as destined for the mobile station are destined for the terminal equipment.

20. (Original) The filter of claim 15, further comprising a snooper, wherein the connection identification list is maintained at said snooper.

21. (Original) The filter of claim 20, wherein at least one subsequent VJ compressed packets to a one of the VJ uncompressed packets having a connection identification on the connection identification list is uncompressed at the mobile station by said snooper.

22. (Original) A method for efficiently processing at least one packet incoming to a mobile station, comprising:

receiving VJ compressed ones of the at least one packet;

storing at least one list, wherein the at least one list includes at least one connection identification of at least one of an active originator and an active destination for ones of the at least one packet; and

comparing a received connection identification of one of the VJ compressed ones of the at least one packet against the at least one list.

23.   (Original)   The method of claim 22, further comprising:

selectively uncompressing ones of the VJ compressed ones of the at least one packet locally to the received connection identifier;

forwarding only those VJ compressed ones of the at least one packet having a received connection identification matching one of the at least one connection identifications on the at least one list to said selective uncompressing.

24.   (Original)   The method of claim 23, wherein said selective uncompressing is local at the mobile station.

25.   (Original)   The method of claim 22, wherein the at least one list includes at least one connection identification of at least one active destination for the VJ compressed ones of the at least one packet.

26.   (Original)   The method of claim 22, wherein the at least one list includes at least one connection identification of at least one active originator for ones of the at least one packet.

27.   (Original)   The method of claim 22, wherein said selective uncompressing is local at a terminal equipment tethered to the mobile station.

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28.   (Original)   A method for efficiently filtering at least one packet incoming to a mobile station, comprising:

receiving IP ones and VJ uncompressed ones of the at least one packet;

delineating the IP ones from the VJ uncompressed ones of the IP packets;

seeking a connection identification in a one of the VJ uncompressed packets upon said delineating of the one of the VJ uncompressed packets as destined for the mobile station;

forwarding the connection identification to a connection identification list.

29.   (Original)   The method of claim 28, further comprising subsequently assessing a destination of at least one VJ compressed packet associated with the one of the VJ uncompressed packets in accordance with the connection identification list.

30.   (Original)   The method of claim 29, further comprising seeking a received connection identification in a subsequent one of the VJ uncompressed packets upon said delineating of the one of the IP packets as destined for the mobile station.

31.   (Original)   The method of claim 28, further comprising tethering at least one terminal equipment to said delineating.

32.   (Original)   The method of claim 31, further comprising forwarding ones of the VJ uncompressed packets not delineated by said delineating as destined for the mobile station to the terminal equipment.

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33.   (Original)   A system for efficiently processing at least one packet incoming to a mobile station, comprising:

a mobile station;

a filter resident on said mobile station that differentiates IP ones of the at least one packet and VJ uncompressed ones of the at least one packet;

at least one PDSN in communication with said mobile station;

at least one terminal equipment communicatively tethered to said mobile station;

at least one snooper on said mobile station, wherein said snooper receives at least one VJ compressed one of the at least one packet incoming to the mobile station from at least one of said PDSN and said terminal equipment, wherein the at least one VJ compressed packet is compared by said snooper to at least one list that includes at least one connection identification of at least one of an active originator and an active destination for ones of the at least one packet, wherein the active destination is resident at at least one of the terminal equipment and a site associated with the PDSN; and

at least one connection local to said mobile station for receiving the at least one VJ compressed packet having the connection identifier that matches the at least one list.

34.   (Original)   A snooper for efficiently processing at least one Internet Protocol (IP) packet incoming to a mobile station, comprising:

at least one storage element for storing at least one list of Van Jacobson (VJ) connection identifications (CID), each VJ CID associated with an active application running on the mobile station; and

a processing element configured to delineate between a packet with a VJ CID and a packet without a VJ CID, and if the packet has a VJ CID, to compare the VJ CID against the entries of the at least one list.

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35. (New) A method for using a mobile station (MS) as a gateway for applications running on either the MS or a terminal equipment (TE) tethered to the MS, comprising:

forming a MS application list comprising connection identification (CID) information;

snooping incoming IP packets for CID information;

comparing each snooped CID information with CID information on the MS application list;

if the snooped CID information is on the MS application list, then passing the IP packet to a MS application; and

if the snooped CID information is not on the MS application list, then passing the IP packet to a TE application.

36. (New) The method of Claim 35, wherein forming the MS application list comprises:

filtering an internet protocol (IP) packet for an application destination; and

if the application destination is located at the MS, then adding the CID of the IP packet to the MS application list.

37. (New) A method for assessing the destination of an Internet Protocol (IP) packet that has arrived at a mobile station (MS) without uncompressing a compressed header of the IP packet, wherein the MS acts as a gateway for applications running on either the MS or a terminal equipment (TE) tethered to the MS, the method comprising:

determining whether the IP packet has a TCP/IP packet header;

determining whether the TCP/IP packet header is Van Jacobson (VJ) compressed or VJ uncompressed;

if the TCP/IP packet header is VJ uncompressed, then adding a connection identification (CID) of the IP packet to an application list;

if the TCP/ID packet header is VJ compressed, then comparing the CID of the IP packet to each CID on the application list;

if the CID of the IP packet is on the application list, then passing the IP packet to the MS without uncompressing the VJ compressed header; and

if the CID of the IP packet is not on the application list, then forwarding the IP packet to the TE without uncompressing the VJ compressed header.

38.   (New) Apparatus for using a mobile station (MS) as a gateway for applications running on either the MS or a terminal equipment (TE) tethered to the MS, comprising:

means for forming a MS application list comprising connection identification (CID) information;

means for snooping incoming IP packets for CID information and for comparing each snooped CID information with CID information on the MS application list; and

means for passing the IP packet to a MS application if the snooped CID information is on the MS application list and for passing the IP packet to a TE application if the snooped CID information is not on the MS application list.

39.   (New) Apparatus for assessing the destination of an Internet Protocol (IP) packet that has arrived at a mobile station (MS) without uncompressing a compressed header of the IP packet, wherein the MS acts as a gateway for applications running on either the MS or a terminal equipment (TE) tethered to the MS, the apparatus comprising:

means for determining whether the IP packet has a TCP/IP packet header and for determining whether the TCP/IP packet header is Van Jacobson (VJ) compressed or VJ uncompressed;

means for adding a connection identification (CID) of the IP packet to an application list if the TCP/IP packet header is VJ uncompressed;

means for comparing the CID of the IP packet to each CID on the application list if the TCP/ID packet header is VJ compressed; and

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means for passing the IP packet to the MS without uncompressing the VJ compressed header if the CID of the IP packet is on the application list and for passing the IP packet to the TE without uncompressing the VJ compressed header if the CID of the IP packet is not on the application list.